



6A Math Summer Packet

For students entering 7th grade Course 2 in the fall

The summer math packet is comprised of important topics that you have studied this year, and will need to recall and use in the fall. Use your notes from the year, and any online reference as needed to refresh your memory. If you run into a question or two on a topic that you did not study in particular, use what you do know to try to work through it to the best of your ability.

Please work on the packet in small chunks throughout the summer, NOT IN ONE SITTING. Working in this way will best help you reinforce and retain the information that you learned this year. SHOW ALL WORK... **DO NOT USE A CALCULATOR!**

After an in-class review of the packet questions, there will be a quiz on these topics during the first week of school in the fall. Working on this packet seriously will ensure retention of the topics learned, and a good start to the next school year. There will also be a quiz on basic math computation facts during the first two weeks of school.

***** PLEASE PRACTICE YOUR MULTIPLICATION FACTS UP TO 13 X 13 EACH DAY *****

Have a safe and wonderful summer!



THIS PAGE LEFT INTENTIONALLY BLANK.

(Students entering 7th grade Course 2)**Find the sum.**

1.) $287 + 304$

2.) $-21 + 12$

3.) $19 + (-27)$

4.) $-17 + (-23)$

Find the quotient. Simplify fraction answers.

5.) $413 \div 13$

6.) $\frac{2}{5} \div \frac{1}{8}$

7.) $\frac{2}{3} \div \frac{4}{9}$

8.) $7 \div \frac{3}{5}$

9.) $1\frac{4}{5} \div 12$

10.) $2\frac{1}{3} \div 1\frac{1}{7}$

$$11.) -32 \div (-4)$$

$$12.) 64 \div (-8)$$

$$13.) -35 \div 5$$

$$14.) 4\frac{2}{3} \div 3\frac{1}{2}$$

Find the product. Simplify fraction answers.

$$15.) 27 \times 146$$

$$16.) 7 \times 2.89$$

$$17.) 4.315 \times 7$$

$$18.) 0.35 \times 0.62$$

$$19.) 2.1 \times 0.4$$

$$20.) \frac{2}{3} \times \frac{5}{9}$$

$$21.) \frac{3}{4} \times \frac{8}{15}$$

$$22.) 8 \times \frac{2}{5}$$

$$23.) 1\frac{2}{3} \times \frac{5}{6}$$

$$24.) \frac{7}{8} \times 2\frac{2}{7}$$

$$25.) 3\frac{1}{3} \times 2\frac{2}{5}$$

$$26.) 11 \times (-8)$$

$$27.) -11 \times (0)$$

$$28.) -6 \times (-12)$$

Evaluate the expression. Remember to use the correct order of operations.

$$29.) 2^3$$

$$30.) 6^2 - 12 \div 3$$

$$31.) 12 + 6 \times 3 - 14 \div 7$$

$$32.) 5^2 + 3 \times 8$$

Evaluate the expression when $w = 8$.

$$33.) 3w + 7$$

$$34.) 48 \div (w + 4)$$

Solve the equation using mental math.

$$35.) 36 - r = 17$$

$$36.) 35 \div r = 7$$

Estimate the length of the object using the indicated unit.

37.) length of the line segment (centimeters)



38.) Find the **perimeter** and **area** of a rectangle with a length of 9 inches and a width of 6 inches. (Draw a picture to help.)

39.) Write 27.0152 in words.

40.) Order the numbers from least to greatest:

6.09, 6.2, 6.12, 6.07, 6.1

Round the decimal as specified.

41.) 296.0377 (nearest hundredth)

42.) Use rounding to estimate the sum $2.8 + 3.2 + 4.7$.

Evaluate the expression when $w = 6.93$

43.) $15.7 + w$

Evaluate the expression when $w = 3.12$ and $y = 5.06$

44.) $(9.1 + w) - y$

45.) Find the area of a rectangle with length 7 meters and width 8 meters. (Draw a picture to help.)

46.) Ground meat costs \$4.92 a pound. You buy 1.8 pounds in one package and 2.3 pounds in another. To the nearest cent, how much do you spend on meat?

Divide. Round to the nearest tenth if your quotient digits do not terminate or repeat.

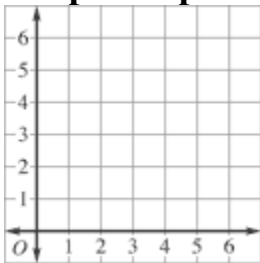
47.) $15 \div 6$

48.) $24.58 \div 9$

49.) $3.906 \div 0.1$

50.) $156.8 \div 0.48$

Graph the point on the coordinate grid. Label A, and B.



51.) $A = (5, 3)$

52.) $B = (2, 4)$

Find the missing value that makes the fractions equivalent.

$$53.) \frac{w}{9} = \frac{42}{54}$$

$$54.) \frac{7}{w} = \frac{35}{60}$$

$$55.) \frac{8}{9} = \frac{w}{81}$$

$$56.) \frac{15 \text{ lb}}{\$3} = \frac{30 \text{ lb}}{w}$$

Tell whether each number is *prime*, *composite*, or *neither*.

$$57.) 34$$

$$58.) 19$$

$$59.) 2$$

Write the prime factorization of the number. Use a factor tree or division ladder to help you. Write the result in exponent form if applicable.

$$60.) 50$$

$$61.) 72$$

Find the GCF of the numbers. (Greatest Common Factor)

62.) 28, 42

63.) 30, 42, 54

Find the LCM of the numbers. (Least Common Multiple)

64.) 12, 15

65.) 6, 8, 12

66.) Three different brands of fettuccini noodles were measured. The thicknesses of noodles from the brands were $\frac{7}{32}$ inch, $\frac{5}{16}$ inch, and $\frac{2}{8}$ inch. Put the fractions in order from least to greatest.

67.) Write $\frac{16}{5}$ as a mixed number AND as a decimal.

68.) Write 5.4 as a mixed number in simplest form AND as an improper fraction.

69.) Write “three and two eighths” as a decimal AND as an improper fraction.

Estimate the sum. (Use benchmarks or 1, 1/2, or 0 for fractional parts.)

70.) $1\frac{1}{10} + \frac{9}{11}$

Estimate the difference. (Use benchmarks or 1, 1/2, or 0 for fractional parts.)

71.) $\frac{7}{8} - \frac{2}{5}$

72.) $3\frac{3}{11} - 1\frac{4}{9}$

Find the sum. (Simplify answers.)

73.) $\frac{1}{7} + \frac{2}{7}$

74.) $\frac{7}{8} + \frac{3}{4}$

75.) $4\frac{1}{3} + 2\frac{5}{12}$

Find the difference. (Simplify answers.)

76.) $3\frac{5}{7} - 1\frac{3}{7}$

77.) $1\frac{2}{3} - \frac{5}{6}$

78.) $2\frac{1}{4} - 2\frac{1}{6}$

79.) You cut $3\frac{1}{4}$ acres of grass on Saturday and $2\frac{2}{5}$ acres on Sunday. How much **more** grass did you cut on Saturday?

80.) Estimate the product $\frac{3}{5} \times 26$

81.) Evaluate the expression $\frac{5}{6}w$ when $w = \frac{3}{10}$

82.) A computer programmer types 100 words in 5 minutes. Write the unit rate. (Words per minute.)

Find the value that makes the fractions equivalent.

$$83.) \frac{14}{35} = \frac{y}{10}$$

$$84.) \frac{64}{w} = \frac{16}{18}$$

Write the decimal as a percent.

$$85.) 0.36$$

$$86.) 0.02$$

Write the fraction as a percent.

$$87.) \frac{14}{100}$$

$$88.) \frac{2}{5}$$

$$89.) \frac{2}{25}$$

$$90.) \frac{9}{4}$$

91.) A survey at a middle school said that $\frac{3}{5}$ of the students had a computer at home. What percent of students have a computer at home?

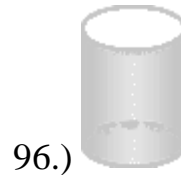
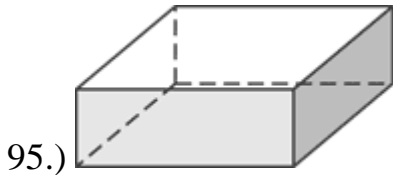
Find the percent of the number.

$$92.) 75\% \text{ of } 12$$

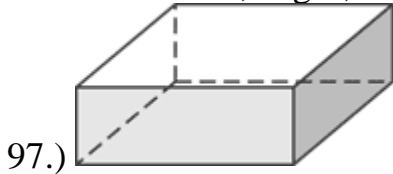
$$93.) 20\% \text{ of } 60$$

94.) The angle measures of a triangle are 62° , 62° , and 56° . Classify the triangle as *acute*, *right*, or *obtuse*.

Classify (name) the solid.



Count the faces, edges, and vertices of the solid.



Faces _____ Edges _____ Vertices _____

98.) Order the integers -1 , -7 , 0 , 3 , -2 from least to greatest.

Find the absolute value of the number.

99.) -10

100.) 13

101.) -25

Find the difference. Change each statement to the correct addition statement first.

102.) $13 - (-7)$

103.) $-27 - 8$

104.) $6 - (-6)$

Write the sentence as an equation. Order of the terms is important!

105.) A number, ' m ' increased by 7 is 9.

106.) The quotient of a number, ' j ' and 6 is 8.

A bag contains 8 pieces of paper labeled (1, 3, 4, 5, 9, 10, 12, and 13). You randomly choose one piece of paper. Find the probability of the event.

107.) The paper has an even number.

108.) The number is greater than 4.

Complete the tables by finding the equivalent simplified fraction, decimal, and percent for each row.

Fraction	Decimal	Percent
$\frac{3}{20}$		
		45%
	0.12	
$2\frac{1}{4}$		
		5%
$\frac{4}{5}$		
	0.02	
$1\frac{2}{5}$		
	0.065	

Fraction	Decimal	Percent
$\frac{4}{25}$		
	0.37	
		8%
	3.75	
		6%
$\frac{7}{10}$		
	0.07	
$2\frac{1}{5}$		
		0.5%